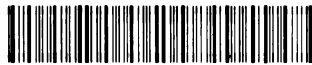




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MODELS WITH CATEGORIZATION BY LEVEL, COURSE,
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IDENTIFICATION OF SECONDARY TEACHERS' PLANNING
MODELS WITH CATEGORIZATION BY LEVEL, COURSE,
AND STUDENT READING ABILITY

By

Christine Culy Forrister

A THESIS

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ABSTRACT

IDENTIFICATION OF SECONDARY TEACHERS' PLANNING MODELS WITH CATEGORIZATION BY LEVEL, COURSE, AND STUDENT READING ABILITY

By

Christine Culy Forrister

The purpose of this study was to obtain, analyze, and compare data about teacher planning models with reference to grade level, kind of course, and consideration of reading comprehension ability. Planning was categorized according to three models as proposed by Tyler (1950), Taba (1962), and Macdonald, Wolfson, and Zaret (1973).

Data were collected by means of a survey constructed for this study, derived from responses to a survey conducted by Koeller and Thompson (1980). Items were added to the survey which would indicate whether or not a teacher considered a student's reading comprehension ability in planning.

The population for this study consisted of 131 secondary teachers in three school districts in Branch County, Michigan. Data were analyzed by the use of chi-square tests, categorization, and percentages.

Analysis of the data resulted in the following findings:

1. Teacher planning models are identifiable as representing Tyler, Taba, or Macdonald, Wolfson, and Zaret.

2. Most teachers plan using the Macdonald, Wolfson, and Zaret model.

3. Junior high and high school teachers of academic and vocational-technical courses use models irrespective of their levels and courses.

4. Teachers' considerations of reading comprehension ability are not related to the grade levels, kinds of courses they teach, or to the planning model they use.

5. Secondary teachers do not consider students' reading comprehension abilities when they plan.

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CHAPTER I

INTRODUCTION

For several decades, curriculum planning was approached as an area for development of rationale, producing prescriptive models and little empirical research. Within the last decade, researchers have begun to collect more empirical data describing how planning is actually done by teachers and to study planning in terms of its relationship with teacher effectiveness. At the same time, concern has been growing over an apparent student decline in language ability, particularly reading comprehension, suggesting that this is an area that ought to be seriously considered by teachers and researchers. Since secondary teachers have not traditionally been specifically charged with the task of improving reading abilities, it might be enlightening to investigate planning at this level. Consequently, this study is an attempt to gather data concerning secondary teachers' planning, including the extent of their consideration of reading ability and the curriculum models they use.

Discussion of Models

Curriculum planning, because of the value-oriented choices it requires, is a subject of controversy. The underlying basis for this controversy is that curriculum determines the nature of education by the value it places on various aspects of the environment. These value judgments influence not only the general framework of an institution but also the instructional programs of individual teachers and the outcomes of instruction. Conceptual models emphasizing different aspects of the learning environment have been postulated. Three important models are those conceived by Tyler (1950), Taba (1962), and more recently Macdonald, Wolfson, and Zaret (1973). A discussion of these three models will serve to delineate the differences among them. The focus will be on the salient value choices that distinguish one from another and make each unique.

Ralph Tyler (1950) proposed a rationale for viewing the curriculum and the instructional program of an educational institution. This rationale, based on the theory that objectives determine materials, content, and instructional procedures, became the basis for a model widely presented in teacher-preparatory institutions from the time of its publication to the present. Tyler's rationale is described as a separate ends-means model because its basic principle is that all aspects of education are means

of achieving ends or purposes. These educational purposes are drawn from a number of traditional sources, including the learners' needs, contemporary life, subject specialists, social philosophy, and psychology, and are stated in a way that allows the school or the teacher to provide experiences designed to fulfill them. Learning experiences are to be organized with regard to continuity, sequence, and integration according to the purposes for which they are intended. Finally, evaluation of outcomes determines the extent to which experiences are meeting the objectives (purposes) stated. A teacher using Tyler's logical model would plan by stating objectives, identifying the learners' abilities, determining learning experiences, and deciding on evaluation of the lesson.

Although Hilda Taba (1962) also suggested that objectives be drawn from a variety of sources, her model differs from Tyler's in its emphasis on diagnosing needs of learners to determine the curriculum for a particular group of students. Only after this important initial diagnosis is made can objectives be formulated. Following objectives, Taba separates content from learning experiences based on her theory that content may be determined by factors other than objectives, such as validity and significance. Once content is selected and organized, learning activities are chosen and organized, based on content to be learned and variations in ability as well

as objectives. Evaluation of learning occurs to learn whether ends are being achieved. Thus, a teacher using a Taba model for planning would assess student needs; state objectives; plan motivation, instruction, and practice; and evaluate to determine whether or not each learner has met objectives.

Based on a rejection of separate ends-means models, James Madonald, Bernice Wolfson, and Esther Zaret (1973) proposed a new conceptual model in which the curriculum is a selected environment that facilitates the development of persons who are liberated rather than controlled, whose instruction is personalized rather than standardized, and who participate in decision making. This integrated ends-means model is based on the need for education to become more humanistic and more value oriented by student-directed learning in which the role of the teacher might be to stimulate student awareness, to respond to this awareness as a resource person, and to initiate learning in students' areas of interest. Schools might be organized by activities areas from which students could choose specific learning experiences on different levels. According to Koeller and Thompson (1980), in traditional school settings, teachers using a Macdonald model would prepare a lesson by first looking at the general area to be taught and the time required, then checking the resource materials for reading levels, writing out areas and skills

to be covered, deciding how to introduce the lesson, integrating the lesson with other subjects, evaluating the lesson, and then relating the lesson to other lessons.

If Tyler, Taba, and Macdonald et al. models have been extensively used to teach educators how planning should be done, then it should be possible to categorize teachers' actual planning into the three models, and it also ought to be possible to determine which is used most often. Factors affecting use of models may also be studied, including type of course, level, and consideration of reading ability.

Statement of the Problem

It is a purpose of this exploratory study to categorize secondary teachers' responses to a planning survey into models as proposed by Tyler (1950), Taba (1962), and Macdonald et al. (1973) and to determine which approach teachers use most often. The existence of a possible relationship will be determined among the following factors: grade levels, junior high or high school; kind of course, academic or vocational-technical; and model, Tyler, Taba, or Macdonald et al. This study will also examine the teachers' considerations of reading comprehension ability in planning. Relationships among model, level, course, and reading ability consideration are explored.

Definition of Terms

The following terms are defined to clarify their meanings in the context of this study:

Reading comprehension: For this study, the meaning of reading comprehension is taken from Herber (1978) and is defined as "a thinking process which includes decoding of symbols, interpreting the meanings of the symbols, and applying the ideas derived from the symbols" (p. 9).

Academic: Academic classes are subject-matter courses encompassing verbal, mathematical and scientific, aesthetic, and psychomotor areas. Thus, art and physical education are included in this kind of course.

Vocational-technical: Vocational-technical classes are courses in which the subject matter is a skill, such as drafting, photography, cosmetology, and auto mechanics.

Junior high: The term junior high includes grades six through nine. Further discussion of this category will be found in Chapter III.

High school: High school is a term denoting the grades 10 through 12.

Justification for the Study

The need for this study is evident for two reasons. First, a need exists to determine the current state of teacher planning in order to effect any change in this area. If teachers are still required to write highly

specific objectives when their major concerns are with general goals and activities, priorities need to change to free these teachers from tasks that are meaningless to them. The accumulated evidence of this and other studies could encourage a more realistic look at planning that teachers actually do, giving teacher-preparatory institutions as well as public schools motivation for change in theory and practice.

The second need is more urgent and perhaps more profound. This study is grounded in the basic assumption that the student's reading ability must be equal to (or at least near) the level at which materials, content, and activities are planned, in order for the student to enter into learning activities or to understand course materials or content. If teachers are not now attending to reading comprehension when they plan for instruction, the results for many students can be disastrous. Those students whose language levels meet or exceed the levels required of them are not unaffected by this neglect, but the students who fall below these levels are in urgent need of teachers whose plans include making sure they can comprehend the materials and content required. This study, in exploring the extent to which teachers include reading comprehension in their plans, paves the way for further research in this area.

Research Questions

In order to guide the study, the following research questions were formulated:

1. Can secondary teacher planning be categorized according to the models formulated by Tyler, Taba, and Macdonald, Wolfson, and Zaret?
2. Which of the models is chosen by most of the teachers?
3. Is there a relationship among the planning model used and kind of course and level?
4. Is there a relationship among consideration of reading comprehension ability and course, level, and model?
5. Do secondary teachers consider reading comprehension ability in their planning?

Limitations of the Study

The major limitation of this study is that planning is a mental process and that people do not have "direct introspective access to higher order cognitive processes" (Nisbett & Wilson, 1977). Nisbett and Wilson suggest that when teachers report on their planning steps, they are merely describing the formal rules for this process and not their actual mental processes. Attempts to overcome this limitation have been made by other researchers; they will be discussed in Chapter II.

Another limitation that must be taken into account is the nature of the survey used to gather the data. An attempt was made to construct a survey reflecting teacher use of three planning models and teacher consideration of reading comprehension. In developing statements for the survey, consideration was given to its length, since it was felt that a short survey would not encompass enough items to reflect accurately the models, while a long survey might result in difficulty for teachers in completing the task. The survey will be discussed further in Chapter III.

Finally, conclusions are limited to the population of the study, which comprised 131 secondary teachers in Branch County, Michigan. This population will be described fully and discussed in Chapter III.

Design of the Study

Teachers' planning models were ascertained by means of a survey constructed for this study. Participants in the study were teachers in a middle school, a junior high school, two high schools, and a careers center in Branch County, Michigan. Teachers were asked to supply information concerning their grade level and subject assignments, so that these categories could be easily sorted. The data were sorted and classified according to the model used, then reclassified with regard to the number of reading

comprehension items chosen. Two tables were created to determine Chi-square values to test null hypotheses formulated from the research questions. Also, percentages of teachers choosing each model and number of reading comprehension items chosen were represented in tables to help clarify the findings.

Overview

The remainder of this thesis describes the study in greater detail. Research and literature pertaining to teacher planning and reading comprehension are reviewed in Chapter II. Chapter III describes the procedures used as well as the sources of data, which are presented and analyzed in Chapter IV. The summary, conclusions, and recommendations are contained in Chapter V.

CHAPTER II

RELATED LITERATURE

Three areas of literature and research are pertinent to this study and are discussed here. They are curriculum models, general instructional planning, and major beliefs about consideration of reading comprehension abilities.

Curriculum Models

Clark and Yinger (1978) mention that empirical studies of teacher planning are not only recent, having been conducted only since 1970, but they are also few in number. Literature on teacher planning up to the past decade had been concerned with promulgation of theory and conceptual models that should produce effective learning by students. Included in this literature are the models proposed by Tyler (1950), Taba (1962), and Popham and Baker (1970).

Tyler's rationale, the major conceptual model used in teacher education, was introduced in 1950 and has been the prevailing model in one form or another since then. Tyler's view was that the instructional program was a functioning instrument of education. Although not directly responsible for formulating objectives in behavioral terms,

he paved the way for this modification by proposing the way objectives were to be used in education: "Educational objectives are educational ends, they are results to be achieved from learning" (p. 24).

Popham and Baker (1970) basically echoed Tyler's thinking, but added the behavioral aspects that have only recently been replaced by more humanistic approaches in popularity. Their description of the model clearly defines the use of behavioral objectives: "A goal-referenced instructional model attends initially to the question of what observable behaviors the learner should possess at the conclusion of instruction" (p. 11).

A model formulated by Hilda Taba (1962) also closely resembles that of Tyler, with one basic difference: She added the needs of the learner as a first step, before formulation of objectives, stating that

. . . an intelligent delineation of concrete and tangible curricular objectives can proceed only after some information is obtained regarding the level on which objectives can be reached by a particular group of students and the emphasis that may be required in the light of their experience (p. 12).

Taba's model also gained recognition and has been used as a model for teacher education. Her book includes rigorous descriptions of how curricula can be formulated and changed, as well as a prescription for diagnosing needs of the students.

There has been a tendency on the part of some reviewers to group Taba and Tyler responses together, without making the distinction necessary to this study. Certainly Taba's model closely resembles Tyler's, but only after the initial inclusion of student needs. It could be argued that this is a minor distinction of no significance, yet as Macdonald and Clark (1973) state, "the selection of a beginning point is a statement of values" (p. 407). Taba's values begin with the needs of the students, before formulation of objectives, which are then stated with regard for this information.

Macdonald, Wolfson, and Zaret (1973) proposed a new model of planning radically different from Tyler's "separate ends-means" model. Making a case for change in education toward humanistic, value-conscious learning environments, they suggested an integrated ends-means model based on students' interests. Their reason for this was that they believed the Tyler model did not reflect the way people naturally learn and develop. The major emphasis of their model can be summarized in one statement: "In contrast, we believe that the curriculum should be organized according to selected areas of investigation" (p. 23). This was, indeed, a sharp contrast to Tyler's model and his thinking.

Instructional Planning

As Clark and Yinger (1978) point out, the first empirical study of teacher planning, conducted by Zahorik in 1970, was an examination of the effect of structured planning on classroom behavior. Findings indicated that Tyler's planning model--objectives, activities, and evaluation--resulted in insensitivity to students' ideas during the lesson (p. 5).

Zahorik (1975) published another study on teacher planning, this time considering the Macdonald et al. prescription. He asked teachers to indicate decisions they made as they prepared to teach; categorized them in one of eight categories, (1) Objectives, (2) Content, (3) Activities, (4) Materials, (5) Diagnosis, (6) Evaluation, (7) Instruction, and (8) Organization; and then determined which model was used and to what extent. Although he discovered that 81% of all teachers in the study included activities in their plans, his findings supported neither the Tyler nor the Macdonald et al. model, but a content approach, which he suggests is unacceptable to curriculum theorists. Additionally, he found that few differences in planning existed for teachers in different levels, content areas, and with varying teaching experience. In assessing Macdonald et al's model, Zahorik states,

Although Macdonald's prescription is less well-known than Tyler's and possibly has fewer supporters, his model may well be descriptive of what teachers actually do (p. 134).

What one teacher actually does was the focus of a study by Yinger (1977), who conducted a five-month investigation in order to describe a model of teacher planning and also to develop two new models. Two central aspects of the teacher's planning and instruction were identified, activities and teaching routines. Two models of teacher planning were developed, one describing planning at five levels: yearly, term, unit, weekly, and daily. The second model was a theoretical model based on data collected in the study and studies of planning in chess thinking, musical composition, art, and architectural design. It was comprised of three stages of planning: problem finding, problem formulation and solution, and plan implementation. Yinger's justification for such a study closely parallels the reason for this study, and so is worth repeating:

It is posited that planning may play an important role in helping teachers to function effectively and efficiently in the classroom by allowing them to manipulate and shape behavior settings. The study of planning, therefore, becomes important because of its role in teaching and because it may be one of the important teaching activities where the teacher can and does function in a more rational and deliberative manner (p. 6).

It appears that the trend in studies of teacher planning is toward comparisons of plans to teaching situations to help determine teacher effectiveness. A study by Peterson, Marx, and Clark (1978) used a laboratory situation to investigate individual differences in teacher planning and the relationship of teacher planning to teacher

behavior and student achievement. A "thinking aloud" technique was used to record teacher decision making, and these statements were coded into seven categories: (1) Objectives, (2) Subject Matter, (3) Instructional Process, (4) Materials, (5) Learner, (6) Miscellaneous, and (7) Productivity. Findings were consistent with Zahorik's study (1975), that teachers spent most of their planning time dealing with content, then instructional processes, and that they spent the least amount of time on objectives. Furthermore, individual differences in teacher planning were found to be related to differences in teachers' cognitive processing styles and abilities.

A study by Morine (1976) used pupil gain scores to differentiate elementary teachers' planning on several possible variables. Morine collected three types of information: plans for a semi-controlled classroom setting, plans for a reading program, and plans altered by practice and exposure to varieties of instruction. Her main purpose was to identify kinds of information used in planning. She used the following codes: specificity of plans, general format of plans, types of statements of goals, source of goal statements, diagnosis, evaluation procedures, alternative procedures, and instructional process. Although the thrust of the study was to gather preliminary information to determine areas for further study, the results indicated that behavioral goals, diagnosis, and evaluation

procedures were not a concern of these teachers. Morine did find that the teachers in the study were generally specific and that written plans are seen by teachers as a "statement of the sequence of procedures to be followed in the lesson" (p. 64). A further finding was that teachers were fairly accurate in assessing reading levels of students from written records, and that these teachers used similar grouping practices and utilized support services in comparable ways.

The most recently published study and also the one providing the foundation for this research is Koeller and Thompson's (1980) investigation of planning approaches used by successful teachers in grades K-6. Faculty and students identified outstanding teachers from among resident teachers in the teacher-education program. These teachers were asked to list decisions they made while preparing lessons for class periods, units, or courses, in the order in which they were actually made. Typical responses for each model were given, and it is from these responses that statements for the survey used in the present study were derived. This process will be described more fully in Chapter III.

Koeller and Thompson found that more than half of the respondents did not use objectives as the first step in their planning sequences. All but one of the respondents included learning experiences or learning activities in

their approaches. The major conclusion was that teachers differ in their preference for specific planning models and that, consequently, teacher-education institutions should consider these models in view of personal preference and varying teaching situations.

Consideration of Reading Comprehension Ability

Rather than review the rather extensive research and literature on this subject, three major authors were chosen whose works are either representative of the thinking on reading ability in instructional planning or are highly pertinent to this study.

In his introduction to Moffett's (1968b) Teaching the Universe of Discourse, Roger Brown of Harvard University says about Moffett, "He has a rare ability to see relations among language study, the curriculum as a whole and some of the general problems of our society" (p. ix). A look at Moffett's views will serve to illuminate the ways in which reading ability relates to curriculum. Moffett's theory is that language, native or foreign, and mathematics, are symbol systems, used as a way of talking or thinking about other things. In contrast, the other subjects are about themselves; i.e., school subjects such as biology and history are about something. They contain bodies of empirical information that can only be studied by means of one of the symbol systems. By this process,

Moffett concludes that the study of how to use language should be conducted through the perception, manipulation, and application of meaningful information from the content areas. He makes a strong case for an integrated language curriculum in the following remarks:

The failure to distinguish kinds and orders of knowledge amounts to a crippling epistemological error built into the very heart of the overall curriculum. The classification by "subject matters" into English, history, math, science, French, etc., implies that they are all merely contents that differ only in what they are about. The hidden assumptions of this classification have taught students to be naive about both symbols and the nature of information; even very bright students are apt to leave high school not understanding the difference between empirical truth and logical validity (p. 6).

Moffett's (1968a) detailed description of a student-centered language arts curriculum is strikingly close to Macdonald et al.'s (1973). In both models, the emphasis is on activities in which students engage and which lead them to further activities and self-created goals, thereby developing both their desire for further knowledge and their language experience along natural, humanistic lines. Moffett's major argument is for teaching language by using the information from the content areas as a broad base for creating learning activities in which language is extensively and creatively used. The implications of such a model for teacher planning are extensive. As Moffett stated, "A student-centered curriculum, on the other hand, is a teacher-teaching curriculum" (p. 32). He sees the

teacher involved in activities with students, not transmitting information to them. Particularly in the secondary schools, many teachers would have to revise not only their plans but also their teaching methods in order to implement Macdonald et al.'s or Moffett's models.

Herber (1978) suggests that the individual teacher can do much to implement a student-centered curriculum without giving up the traditionally accepted boundaries of curriculum as it is known. One way of doing this is by promoting activities that can be carried out by small inter-class groups. His integrated ends-means model is explained with regard to reading skills:

The curriculum is comprised of content. Since reading skills are learned only in reference to the material being read, the content of the curriculum serves as the vehicle for the reading skills to be learned. Again, since content determines process, the skills taught are those essential to understanding the material. When reading skills are taught as means to an end, that end being an understanding of the content of a curriculum, they are more likely to be learned than when they are taught as ends in themselves, taught for their own sake without regard for the content of the curriculum or the material they ultimately will be applied to (p. 5).

Using Herber's approach, content teachers would be teaching reading skills needed in the specific subject areas. His reason for this approach is primarily due to his finding little or no carryover of reading ability from reading classes to subject-matter classes, and further, that subject-area teachers often make unfounded assumptions that students can read and understand their texts

and materials. He advocates a system whereby teachers show students how to learn their content material.

What teachers actually do in the classroom with regard to reading comprehension instruction was the focus of a study by Dolores Durkin (1979). Observing reading and social studies instruction in grades 3-6, Durkin categorized student and teacher behaviors and timed their duration. Defining comprehension instruction as efforts (a) to teach children the meaning of a unit that is larger than a word or (b) to teach them how to work out the meaning of such units, she isolated eight comprehension categories of teacher behavior: instruction, review of instruction, application, assignment, help with assignment, preparation for reading, assessment, and prediction. Results of the research indicated that the only category commonly reported was comprehension assessment, the kind of question-answer activity that centered on right and wrong answers. Large amounts of time were spent on some aspect of assignments in social studies, with no comprehension instruction observed. Categories described as transition and noninstruction also consumed much of the time in both reading and social studies periods.

Durkin concluded that vast amounts of ditto sheets and workbooks constituting busy work may be used because they are easy, because teachers think such materials constitute good instruction, or because they think it is

expected of them. She suggested that widespread use of reading comprehension methodology techniques indicated that lack of knowledge was not the reason for their lack of existence. "Since it seems safe to say, then, that the observed teachers knew more than they used, teaching them still more is not apt to alter how they spend their time when, presumably, they are teaching reading" (p. 526). She also suggested that more observational studies are needed to provide information for authors of basal materials, authors of methodology texts, and professors of reading methods courses. Finally, Durkin recommended that "identifying what influences teachers to do what they do becomes crucially important" (p. 526).

Reviewing Durkin's study, Frederick Smith (1979) sums up its implications for secondary teachers:

Understanding the danger of generalizing from a single study but acknowledging that this investigation was designed and accomplished by a recognized leader in reading education, the teacher in the secondary school might be justified in wondering, "Who is teaching children to read and to comprehend what is read? We know that it is not being done at the secondary school level, but we thought it was being taken care of in the elementary schools" (p. 536).

Smith makes a case for diversification in teacher-education programs based on Durkin's findings, which can be summarized by his rhetorical question: "But how can we create a situation in which teachers view reading as an integral component of the study of the subject which they teach and not merely a prerequisite to it?" (p. 537).

Summary

The review of the literature indicates that teacher planning is a relatively recent concern of researchers. Previous literature was comprised of prescriptive models based on curriculum theory, which advocated a separate ends-means approach using objectives in one form or another. Results of the first empirical study on teacher planning caused the researcher to conclude that the typical planning model resulted in teachers' insensitivity to pupils. A new, radically different model appeared which advocated an integrated ends-means approach centering on student activities and based on a humanistic concept. Studies since then have attempted to discover what teachers actually do when they plan, and how it may affect learning outcomes. Their findings indicate that Macdonald et al.'s (1973) model may be used more often than Tyler's (1950), and that new models could be generated from intensive observations of one teacher's planning along with studies from other fields.

Two representative theories in the reading comprehension area can be said to be compatible with the Macdonald et al. model in their approach by integrated ends-means and their emphasis on student activities as curricular considerations. A recent study in the intermediate grades suggests that reading comprehension instruction is not often found in the classroom, even at these early levels,

and a review of this study elaborates its implications for secondary reading ability consideration.

CHAPTER III

METHODOLOGY

This chapter contains a discussion of the methodology used in conducting the study. The population is identified, and the data-gathering procedure is described. Construction and administration of the research instrument are explained, along with statistical treatment of the data.

Population

The study was conducted in three Branch County, Michigan, school districts, with all secondary teachers who were willing to complete the survey as participants. Teachers surveyed included both men and women. Mean years of experience for this group was 10.3, with a range from 1 to 29 years. The final data represent the responses of 131 teachers.

Included in the population were teachers from a junior high school (grades 7-9) and a middle school (grades 6-8), but the two categories were combined for this study and called junior high. One of the high schools consisted of grades 9-12, but ninth-grade teachers' surveys were also placed in the junior high school category. Thus

the junior high category includes grades 6 through 9, and the high school category included grades 10 through 12.

Collection of Data

All data were collected in three of the four school districts in Branch County, Michigan, including the Branch Area Careers Center, a vocational-technical secondary school operated by the Branch Intermediate School District. These schools can be characterized as small, rural districts located in a small, rural county. One of the schools surveyed is the largest in the county. The larger district serves students from the county seat, a city of about 10,000, while the smallest district in this study is a consolidation of one village and several smaller communities, including a large, strictly rural population.

Data were collected at a junior high, a middle school, and two high schools, as well as the careers center. The first step taken was to meet with principals in the buildings to explain the procedure and secure their aid and permission in arranging a time when the survey could be conducted. All five of the building principals were gracious and extremely helpful in facilitating times and places for the meetings. Teachers were asked to attend meetings at which the writer administered the survey, gave directions, and answered questions. A few teachers were excluded due to the nature of their work, such as the

librarian and the counselors, and a small number refused to complete the survey.

Instrumentation

A survey was developed listing steps a teacher might take in planning. Teachers using a Tyler model would plan by stating objectives, identifying the learners' abilities, determining learning experiences, and deciding on evaluation of the lesson. If the Taba model were used, a teacher would first assess student needs; then state objectives; plan motivation, instruction, and practice; and evaluate to determine whether or not each learner has met objectives. Teachers using a Macdonald et al. model would prepare for a lesson by first looking at the general area to be taught and the time required, then checking the resource materials for reading level, writing out areas and skills to be covered, deciding how to introduce the lesson, integrating the lesson with other subjects, evaluating the lesson, and then tying the lesson together with others.

These steps were adapted from teacher responses that were typical for the different models as collected by Koeller and Thompson (1980), and all steps were included so that a teacher could choose any of the models. In addition, 11 items were included which describe steps in planning that would be chosen by a teacher considering students' reading comprehension abilities. The total

number of items on the survey was 27. The survey was comprised of four sheets: a cover sheet listing years of experience, level, and course taught, and three copies of the survey with three different sets of directions. The directions on the first copy asked teachers which of the planning steps they felt were important. This was done so that participants could become familiar with the survey and make an initial judgment which was not considered important to the study.

The directions on the second page asked teachers to choose the items that describe what they actually do in planning a lesson, a course, or a unit. Responses from this page of the survey were used to compile the data regarding reading comprehension. This was done by counting the number of items chosen.

Directions for the third page were most difficult and so were kept to the last page when it was felt that participants would be familiar with the contents of the survey. These directions asked teachers to sequence the first nine steps they used in planning. Sequencing was limited to nine because it was felt that nine responses would easily allow the researcher to perceive the model used. This page was used to categorize teachers according to use of the three models as proposed by Koeller and Thompson. If the initial steps chosen were not matching with one of the models, the researcher could review all of

the steps chosen, in sequence, and categorize them according to the emphasis of the steps, i.e., needs assessment, objectives, or activities.

The instrument was trial tested on two teachers and one administrator to try to identify any problems that might be in it. One of the teachers and the administrator suggested that all of the steps a teacher might use in planning seemed to be well represented, and neither of these people could detect an emphasis on reading comprehension. The third teacher disqualified herself, since she was able to perceive the reading comprehension items right away, due primarily to her help and interest at the inception of this project. This person also read the directions to the survey to see how they might be perceived; they were adjusted and appeared on the survey with her suggestions.

It is felt to be necessary to justify the use of a survey as opposed to some of the other methods that have been used, such as tape recording teachers "thinking aloud" during actual planning, or asking teachers to write down the steps they use. Although this type of information could quite likely be coded as easily as the survey responses were, it is doubtful that any mention of reading comprehension would appear in these reports. To ask for such items might bias the results by apprising the participants of the nature of the investigator's concern.

The reading comprehension items, which might have been universalized to include oral discourse, had to be curtailed because of length, and so the definition of language ability was specified, as noted in Chapter I, as primarily a reading process, not the speaking, reading, and writing integration it would normally include.

A copy of the steps on the survey appears in the Appendix. It was not felt necessary to include the entire survey, as it was identical with the exception of the different directions as explained here. One further note of importance is that the announcement was made at the beginning of the survey that any steps the teacher made which were not included in the survey could be added at the bottom.

Analysis

Analysis of the data was conducted according to the research questions:

1. Can secondary teacher planning be categorized according to the models formulated by Tyler, Taba, and Macdonald, Wolfson, and Zaret?
2. Which of the models is chosen by most of the teachers?
3. Is there a relationship among the planning model used and kind of course and level?

4. Is there a relationship among consideration of reading comprehension ability and course, level, and model?
5. Do secondary teachers consider reading comprehension ability in their planning?

To answer Question 1, the surveys were first separated by grade level and course using the information supplied by participants on the cover sheet. By determining the order in which items were sequenced, the surveys were then categorized into model used. As previously stated, in a few cases, responses might have to be coded by the general approach of all of the items sequenced. This division also yielded information to answer Question 2.

Research Questions 3 and 4 were restated in null form in order to analyze the data:

Ho₃: The model chosen is independent of a teacher's classification as to level and kind of course taught.

Ho₄: The number of reading comprehension items chosen is independent of a teacher's classification as to grade level, course, and planning model.

Chi-square tests of independence were used to test these null hypotheses.

Data concerning Research Questions 2 and 5 were analyzed by a simple number, or percentage, reporting. This method, also used in studies of this type of Zahorik

(1975) and Koeller and Thompson (1980), best describes nonrelationship data, such as the number of teachers surveyed whose responses were typical of one model or another.

It should be noted that although two levels were identified for the academic category, only one was used for vocational-technical courses, since these are typically taught at the upper levels, in grades 10-12.

Summary

Data were collected by means of a survey completed by 131 secondary teachers in three small school districts in Branch County, a rural county in southern lower Michigan. The survey was constructed by the writer and is reproduced, in part, in the Appendix. It contains steps reflecting the Tyler, Taba, and Macdonald et al. approaches, as well as 11 items determining reading comprehension consideration, for a total of 27 items. Teachers were asked to list steps they felt were important, steps they used, and steps they used in sequence. From these responses, surveys were categorized by grade level, course taught, model used, and reading comprehension items chosen.

Chi-square tests were used to determine if there were relationships among these factors, and some of the data were compiled in numerical or percentage form.

CHAPTER IV

ANALYSIS OF RESULTS

The purpose of this study was to obtain, analyze, and compare data about planning models used by secondary teachers in three school districts of Branch County, Michigan, and to determine whether or not these teachers consider students' reading ability when they plan. The researcher identified models and reading comprehension consideration by means of a survey checklist constructed for this study. The data pertinent to models and reading ability consideration were then related to teachers' classifications as to level and kind of course taught.

The previous chapter described the procedure for collecting and classifying the data. This chapter will present the statistical and numerical analyses as they relate to the research questions.

Research Questions

Question 1

Can secondary teacher planning be categorized according to the models formulated by Tyler (1950), Taba (1962), and Macdonald, Wolfson, and Zaret (1973)?

The participants were requested to check their planning steps in sequence on page 3 of the survey. They were told to add any additional steps, if necessary, but none did. Most of the surveys were easy to categorize, but if the initial steps did not match those of one of the models, the researcher reviewed all of the steps chosen to determine the teacher's emphasis: on objectives for Tyler, on needs assessment for Taba, or on activities for Macdonald et al. models. This method was also used by Koeller and Thompson (1980) when they categorized elementary teachers' planning steps.

Most of the surveys could be categorized by the following criteria: A sequence of objectives, learners' abilities, learning experiences, and evaluation indicated a Tyler model; a sequence listing learners' abilities first, then objectives, motivation, instruction, practice, and evaluation of individuals indicated a Taba model; steps sequenced as general area and time required, checking resource materials, writing out areas and skills, introduction, integration, evaluation, and tying lessons together were indicative of a Macdonald et al. model.

Question 2

Which of the models is chosen by most of the teachers?

A simple numerical analysis shows that of 131 teachers surveyed, 46% use the Macdonald et al. model for planning,

while 36% use Tyler's model and 18% use Taba's. These results are summarized in Table 1.

Table 1: Summary of Teachers Choosing One of Three Planning Models

Model	Number	Percentage of Total
Tyler	47	36%
Taba	24	18%
Macdonald et al.	60	46%
Totals	131	100%

Question 3

Is there a relationship among the planning model used and kind of course and level?

In order to analyze the data, this question was restated in null form:

H_{03} : The model chosen is independent of a teacher's classification as to level and kind of course taught.

The Chi-square test for independence was used to test this null hypothesis. The data are summarized in Table 2. The result of the test was a χ^2 of 3.534 (with four degrees of freedom), which was not found to be significant at the $\alpha = .05$ level. Therefore the null hypothesis was not rejected, and no relationship could be reported.

Table 2: Summary of Responses for Grade Level and Kind of Course With Regard to Model Used

Model	Academic		Vocational- Technical	Totals
	Jr. High	High School		
Tyler	22	10	15	47
Taba	12	8	4	24
Macdonald	25	22	13	60
Totals	59	40	32	131

$$\chi^2 = 3.534 \quad p > .25$$

Question 4

Is there a relationship among consideration of reading comprehension ability and course, level, and model?

This question was also restated in null form to analyze the data:

Ho₄: The number of reading comprehension items chosen is independent of a teacher's classification as to grade level, course, and planning model.

The Chi-square test was also used to test this hypothesis. This relationship is summarized in Table 3. The result of the test was a χ^2 of 20.514 (with 16 degrees of freedom), which was not found to be significant at the $\alpha = .05$ level. Therefore the null hypothesis was not rejected, and no relationship could be reported.

Table 3: Summary of Responses for Grade Level, Course, and Model With Regard to Consideration of Reading Comprehension Ability

No. of Items Used	Academic						Vocational-Technical			Totals
	Junior High			High School			High School			
	Tyler Taba Macdonald			Tyler Taba Macdonald			Tyler Taba Macdonald			
0-2	8	3	8	1	3	7	5	1	8	44
3-5	9	3	11	6	2	10	8	3	5	57
6-11	5	6	6	3	3	5	2	0	0	30
Totals	22	12	25	10	8	22	15	4	13	131

$$\chi^2 = 20.51349$$

Question 5

Do secondary teachers consider reading comprehension ability in their planning?

Based on the criterion that a choice of six or more items constitutes a reading comprehension consideration, results reveal that 23% of all teachers surveyed consider students' reading ability when they plan. Furthermore, an analysis within each cell results in the percentages of teachers of each course and level who consider reading comprehension abilities. Of academic teachers surveyed, 28% chose six or more items, while among vocational-technical teachers, only 6% met this criterion. Also, 29% of junior high teachers and 18% of high school teachers use this approach. A summary of this analysis is reported in Table 4.

Summary

Secondary teacher planning can be identified according to models formulated by Tyler, Taba, or Macdonald et al. No statistically significant relationship was found among kind of course, level, and model chosen. No relationship was found among number of reading comprehension items chosen and model, level, and course. Of the 131 teachers surveyed, 46% use an approach most like Macdonald et al.'s model, 36% use an approach most like Tyler's model, and 18% use an approach resembling Taba's. Of all

Table 4: Summary of Percentages of Teachers Within Levels and Courses Considering Reading Comprehension Ability

	Academic	Vocational- Technical	Junior High	High School	All Teachers
Total in this category	99	32	59	72	131
Number who chose 6 or more items	28	2	17	13	30
Percentage of total in this category	28%	6%	29%	18%	23%

teachers surveyed, 23% considered reading comprehension abilities. Twenty-eight percent of academic teachers, 6% of vocational-technical teachers, 29% of junior high teachers, and 18% of high school teachers consider reading comprehension to the extent of choosing six or more items designed to test this factor of the survey.

CHAPTER V

RESULTS, FINDINGS, AND RECOMMENDATIONS

The purpose of this study was to obtain, analyze, and compare data about teacher planning models with reference to grade level, kind of course, and reading comprehension ability. Data were collected from 131 secondary teachers in three school districts in Branch County, Michigan.

Previous chapters described the setting, population, methodology, and analysis of the data. This chapter is organized as follows:

1. Major results
2. Relation of findings to literature
3. Implications of the findings
4. Recommendations for future research

Major Results

Within the limitations of setting, population, and methodology, the results of this study are the following:

1. Teacher planning models are identifiable as representing Tyler (1950), Taba (1962), or Macdonald et al. (1973), from a survey checklist asking teachers to sequence steps they use in planning.

Teachers using a Tyler model chose the following steps: stating objectives, identifying learners' abilities, determining learning experiences, and deciding on evaluation of the lesson. Teachers were identified as using a Taba model when they chose this sequence of steps: assess student needs; state objectives; plan motivation, instruction, and practice; evaluate to determine if learner has met objectives. The following sequence identified Macdonald et al. model users: look at the general area and time, check resource materials for reading level, write out areas and skills, decide on an introduction, integrate the lesson with other subjects, evaluate the lesson, and tie the lesson together with others.

2. Most teachers plan using the Macdonald et al. model. Of 131 teachers surveyed, 46% of them use the Macdonald et al. model, while 36% use Tyler's model and 18% use Taba's.

3. Junior high and high school teachers of academic and vocational-technical courses use models irrespective of their levels and courses.

4. Teachers' considerations of reading comprehension ability are neither related to the grade levels or kinds of courses they teach, nor to the planning model they use.

5. Secondary teachers do not, as a group, consider students' reading comprehension abilities when they plan. Only 23% of all teachers surveyed can be identified as

considering reading ability. Of academic teachers, 28% consider reading ability, while 6% of vocational-technical teachers do. Of high school teachers, 18% consider reading ability, while 29% of junior high teachers do.

Relation of Findings to the Literature

Zahorik (1975) found that 83% of all secondary teachers listed activities as a planning step, while only 4% listed this step first. By comparison, this study found that 46% of secondary teachers plan by focusing on activities first, or with activities as a major emphasis. Zahorik's criterion for a Macdonald et al. model was much more stringent than the one used for the Koeller and Thompson (1980) study; i.e., he felt that some indication had to be given that general activities permitting a great deal of student latitude were being generated. It is quite possible that his method of collecting the data, by asking teachers to list in writing their planning decisions, afforded him a more complete look at the overall planning model. However, Koeller and Thompson, who used a similar method of data collection, found that 17 of the 56 elementary teachers (or 30%) used a Macdonald et al. planning model, while Zahorik found only 3%. The differences between this study and those of Zahorik (1975) and Koeller and Thompson can be accounted for by several factors, one of which is time. It is possible that exposure to

Macdonald et al.'s model over five years has made a difference in the number of teachers using it; it is also probable that the samples were quite different, Zahorik's being a random sample and Koeller and Thompson's being selected from outstanding teachers. This study's results are more similar to the most recent study, which could be a time factor; yet, different samples were used and different grade levels in the two studies. One factor relating to the similarity of this study and Koeller and Thompson's is that the survey developed for this investigation was adapted from typical responses as reported in their study.

It is suggested that the data comparing teachers within the categories may substantiate the conclusion that lower grade levels pay more attention to the reading abilities and needs of their students; in addition, it may be concluded that academic teachers are more likely to consider reading comprehension than vocational-technical teachers. This conclusion is tempting because it follows the logical belief that younger students and subject-matter-oriented courses require more attention to reading comprehension than do older students and skills-oriented courses. Such a conclusion, logical as it seems, must be tempered with the warning that the technique used to collect the data, as well as the nature of the sampling, severely limits the generalizability of the results.

Although the sample size was sufficient and seems to represent a variety of opinions, it is still considered risky to generalize to teachers or courses generally or to rural areas such as the one from which the population was taken.

Within the aforementioned limitations, findings from this study may be compared with those of Morine (1976), whose codes for kinds of information used in planning can be roughly compared with steps of the models being considered here. Since the Tyler model centers on objectives, the Taba on diagnosis of needs, and the Macdonald et al. on activities, Morine's results are similar to those found in this study, i.e., that most teachers are not concerned with behavioral goals (Tyler), diagnosis (Taba), or evaluation (Tyler and Taba), but with instructional process (Macdonald et al.) and with specificity of plans. This researcher also found more teachers concerned with a sequence of procedures than with objectives, diagnosis, or evaluation.

It is possible that teachers are using a more activities-oriented model to plan their lessons. If so, they would be at least near to implementing Moffett's (1968a) integrated language curriculum, if these same teachers are the ones considering reading abilities. These considerations would also relate these teachers with Herber's (1978) approach, using specific subject matter as a vehicle for reading skills.

With regard to consideration of reading comprehension ability, this study may complement Durkin's findings, since she reported no comprehension instruction taking place during the content period, and this study concludes that teachers don't plan for such instruction. Her premise was that this type of instruction would surely take place at the intermediate levels, where a traditional switch takes place from "learning to read to reading to learn" (Durkin, 1979, p. 494), yet her findings failed to support this assumption. The current study assumes that more comprehension instruction takes place at the junior high level and concludes that teachers at that level consider reading comprehension ability in their plans somewhat more than do high school teachers.

Implications of Findings

One of the implications of these findings, even in view of their limitations, is that some variable or set of variables causes teachers to plan according to one of the three models discussed. Although this could be a function of what they have been taught in their teacher-preparatory institutions, it is suggested here as possible that the Macdonald et al. model is used more often because it is a more natural approach to teaching as well as learning. This, it is suggested, is because teaching is a complex interaction for which rigid goals are not appropriate,

and because secondary teaching involves so many students that individual diagnosis is unrealistic.

Other possibilities for using one model over another could be that administrators require a certain model or that one is more appropriate to the subject matter or the teaching situation.

Although Durkin suggests that teachers use less than they know, it is important to recall that her study concerned upper-elementary teachers, and this investigator suggests that the secondary teachers surveyed here could be unaware of techniques and methodology for teaching reading comprehension in the content areas. It might be easier for teachers already using an integrated Macdonald et al. approach to incorporate reading comprehension abilities into their plans and subsequently their teaching, if they were adequately prepared in this area.

Recommendations

A study of this kind can be useful, along with the other empirical studies reviewed here, in discussions of teacher planning in both teacher preparatory institutions and in the public schools. Discussions such as this might lead to better understanding of the models individual teachers actually use, as well as the possible models available. This study adds an important facet to such hypothetical discussions--that of reading comprehension

consideration. Through discussion and professional development, teachers and preservice teachers may become more aware of the need for such an approach.

A further use of the study may be in future research, extending the survey with follow-up interviews or classroom observations to determine a match between planning approach and teacher effectiveness. The survey could also be used as the basis for a different type of questionnaire, where carefully constructed questioning techniques might elicit a more thorough response and consequently a more accurate view of teachers' planning approaches. A more sophisticated instrument with more valid scoring might also yield useful data for researchers, teachers, and students in education courses.

A more specific recommendation can be made on the basis of findings of this and other studies. If 23% of the teachers consider reading comprehension abilities when they plan, a study comparing these teachers with the others might provide a foundation for identifying characteristics of teachers that should be developed. Specifying such characteristics might begin to answer Durkin's concern that we need to find out what influences teachers to do what they do.

If one accepts Durkin's assumption that teachers know more than they use, perhaps a useful outgrowth of this study would be to investigate secondary teachers' knowledge

about planning and reading comprehension, with relation to their plans and their consideration of reading ability.

Smith's rhetorical question, asking how we can create a situation in which teachers integrate reading and subject matter, suggests that studies would be useful which provide information about various alternatives to in-service and professional development programs, with regard to better integration of reading.

Teacher planning is an important and useful area to investigate. Nisbett and Wilson's admonishments for caution in studying behavior that attempts to describe cognitive processes are important. However, studies of teacher planning tend to lead to considerations of teacher effectiveness and therefore should be continued until they reach a level of preciseness so that the results can be more valid for change.

The need for teacher consideration of their students' reading comprehension abilities has been an underlying assumption of this study. It is recommended that the study of consideration for this need be continued if reading abilities are to be developed in meaningful contexts.

APPENDIX

APPENDIX

- ___1. I decide on the time required to teach the material.
- ___2. I decide on an introduction to the lesson.
- ___3. I plan instruction to provide subject matter and check for understanding.
- ___4. I state my language/subject objectives and purposes.
- ___5. I plan to evaluate to be sure each learner has met the language/subject objectives.
- ___6. I plan for individual practice.
- ___7. I plan guided practice.
- ___8. I identify objectives to be taught.
- ___9. I plan a variety of learning experiences to suit the styles of the students.
- ___10. I plan for students to practice on their own with vocabulary, concept and comprehension exercises.
- ___11. I plan ways to evaluate the lesson to meet the needs of individual students.
- ___12. I plan motivation to focus the attention of the learner on objectives and the purpose of the lesson.
- ___13. I check to see in what ways the lesson can be integrated with other subjects.
- ___14. I read the resource materials and check their reading level.
- ___15. I identify the abilities of the students.
- ___16. I write out a format of areas and skills to be covered.
- ___17. I tie the lessons together for general review.
- ___18. I look at the general area to be taught.
- ___19. I plan for guided practice using puzzles, matching exercises, concept categorizing and study guides.

- ___20. I decide how to introduce new vocabulary and plan for a structured overview (graphic representation of terms and their relationships).
- ___21. I use open-book tests to measure students' abilities to read and comprehend the text.
- ___22. I check to see if terms or concepts are used in other areas of the curriculum.
- ___23. I plan a variety of learning experiences including vocabulary extension exercises and study guides to suit the individual styles of students.
- ___24. I review the structured overview, study guides and vocabulary exercises to tie the lessons together.
- ___25. I plan for individual or group evaluation.
- ___26. I read resource materials to find those which cover the general area.
- ___27. I use informal or standardized tests to assess language abilities of students.

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REFERENCES

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